

Application No.: 10/719,904

Docket No.: MWS-053

**REMARKS**

Now pending in the application are claims 1-37, of which claims 1, 13, 23, 27 and 29 are independent.

**I. Summary of Rejections**

Claims 1-28 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

Claims 1-37 are rejected under 35 U.S.C. §102(b) as being anticipated by the SIMULINK user manual, version 4 (2001).

These rejections will be discussed below separately.

**II. Claim Rejections under 35 U.S.C. §112**

Claims 1-28 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. (See Office Action, page 2).

The Examiner notes that there is insufficient antecedent basis for the limitation of "the second mode" in claim 1, line 7. Applicant has amended claim 1 to change the limitation "the second mode" to "a second mode."

The Examiner also notes that "the attribute" in claim 1, line 7, claims 13, line 8, claim 23, line 8 and claim 27, line 8 is interpreted as "the at least one attribute." Applicant has amended claims 1, 13, 23 and 27 to change "the attribute" to "the at least one attribute."

In view of the amendments, Applicant respectfully requests withdrawal of the rejection of claims 1-28.

**III. Claim Rejections under 35 U.S.C. §102**

Claims 1-37 are rejected under 35 U.S.C. §102(b) as being anticipated by the SIMULINK user manual, version 4 (2001) (hereinafter "the user manual"). (See Office Action, page 3). Applicant respectfully traverses the rejection.

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**A. Claim 1**

Applicant respectfully submits that the user manual does not disclose at least the following features of claim 1: (1) "setting the latch component to a first mode in which the latch component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event," and (2) "in the second mode, the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes."

**1. "setting the latch component to a first mode in which the latch component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event"**

The Examiner refers to the user manual, pages 9-148 and 9-149 as disclosing the above-identified feature. (See Office Action, page 3). Applicant respectfully submits that the referenced portion of the user manual does not disclose "setting the latch component to a first mode in which the latch component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event," as required by claim 1.

The user manual discloses an Inport block that creates an input port for a subsystem or an external input. (See the manual, page 9-146). The Inport does not automatically determine and *lock* the at least one attribute of the signal *on an occurrence of a triggering event*, as required by claim 1. In the referenced portion of the user manual, the Inport block outputs the stored or latched input on the occurrence of a trigger event.

The referenced portion of the user manual discloses a dialog box for specifying the parameters of the Inport block. (See the manual, page 9-148). The dialog box includes "Latch (buffer) input" field that "is enabled only if the Inport block resides in a triggered subsystems." (See the manual, page 9-149). If the Latch (buffer) input field is selected, the Input port "outputs the value of its input at the previous time step." (See the manual, page 9-149).

The Examiner alleges that "Latch input field traps the data (signal) path to maintain the data unchanged." (See Office Action, page 3). The Examiner equates the Inport block disclosed in the user manual to the latch component required by claim 1. Applicants respectfully disagree.

The latch option of the Inport block is enabled only if the Inport block resides in a triggered subsystem. (See the manual, page 9-149). A triggered subsystem is a conditionally

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executed subsystem that executes once each time a trigger event occurs. (See the manual, page 8-2). In particular, when the latch option is selected, the Inport block outputs its input signal received at the previous time step. (See the manual, page 9-149). That is, the Inport block stores or *latches* its input signal *at a previous time step*, and *outputs* the stored or latched input signal *on the occurrence of a trigger signal*. Although the Inport block provides a “latch” option, the Inport block does not provide “a first mode in which the latch component *automatically determines and locks* the at least one attribute of the signal *on an occurrence of a triggering event* (emphasis added),” as required by claim 1.

**2. “in the second mode, the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes”**

The Examiner refers to the user manual, pages 9-148 and 9-149 as disclosing this feature. (See the Office Action, page 3). Applicant respectfully submits that the referenced portion of the user manual does not disclose that “in the second mode, the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes,” as required by claim 1.

As discussed above in section III.A.1, the referenced portion of the user manual discloses that the Inport block latches its input signal at a previous time step, and outputs the latched input signal on the occurrence of a trigger event. The referenced portion of the user manual, however, does not disclose that the Inport block locks the input signal from changing *when the design of the system changes*, as required by claim 1. The referenced portion of the user manual is silent about locking signal attributes when the design of the system changes.

As such, Applicant requests withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b).

**B. Claims 2-12**

Claims 2-12 depend on base claim 1 and, as such, incorporate all of the features of claim 1. Accordingly, claims 2-12 are in condition for allowance for at least the reasons set forth above with respect to claim 1.

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Furthermore, the user manual does not disclose the following feature of claim 6: "the latch component receives information from an application programming interface (API) of the design and execution software tool and automatically determines the at least one attribute of the signal based on the information received from the API of the design and execution software tool." The Examiner refers to the user manual, page 4-32 as disclosing this feature. The referenced portion of the user manual discloses the attributes of signals, such as signal dimensions and signal data types. The referenced portion of the user manual, however, does not disclose that the latch component receives information from an API and automatically determines the attribute of the signal based on the information received from the API. The referenced portion is silent about an API.

As such, Applicant requests withdrawal of the rejection of claim 6 under 35 U.S.C. §102(b).

### **C. Claim 13**

Applicant respectfully submits that the user manual does not disclose at least the following features of claim 13: (1) "providing the component with a first mode in which the component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event," and (2) "the at least one attribute of the signal is locked to be prevented from changing in the second mode when the design of the system changes."

#### **1. "providing the component with a first mode in which the component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event"**

In rejecting claim 13, the Examiner relies on the same reasons set forth in connection with the rejection of claims 1-6 and 12. (See Office Action, page 7). In the rejection of claim 1, the Examiner refers to pages 9-148 and 9-149. (See Office Action, page 3). As discussed above in section III.A, the referenced portion of the user manual does not disclose "a first mode in which the component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event," as required by claim 13.

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**2. "the at least one attribute of the signal is locked to be prevented from changing in the second mode when the design of the system changes"**

As discussed above in section III.A, the referenced portion of the user manual discloses that the Inport block latches its input signal at a previous time step, and outputs the latched input signal on the occurrence of a trigger event. The referenced portion of the user manual, however, does not disclose that the Inport block locks the input signal from changing *when the design of the system changes*, as required by claim 13. The referenced portion of the user manual is silent about locking signals when the design of the system changes.

As such, Applicant requests withdrawal of the rejection of claim 13 under 35 U.S.C. §102(b).

**D. Claims 14-22**

Claims 14-22 depend on base claim 1 and, as such, incorporate all of the features of claim 1. Accordingly, claims 14-22 are in condition for allowance for at least the reasons set forth above with respect to claim 13.

Furthermore, the user manual does not disclose the feature of claim 16: "the component receives information from an application programming interface (API) of the design and execution software tool and automatically determines the at least one attribute of the signal based on the information received from the API of the design and execution software tool." As discussed above in section III.B, the referenced portion of the user manual is silent about an API.

As such, Applicant requests withdrawal of the rejection of claim 16 under 35 U.S.C. §102(b).

**E. Claim 23**

Applicant respectfully submits that the user manual does not disclose at least the following features of claim 23: (1) "setting the latch component to a first mode in which the latch component automatically determines and locks the at least one attribute of the signal on an

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occurrence of a triggering event,” and (2) “the at least one attribute of the signal is locked and prevented from changing in the second mode when the design of the system changes.”

**1. “setting the latch component to a first mode in which the latch component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event”**

As discussed above in section III.A, the user manual does not disclose “setting the latch component to a first mode in which the latch component automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event.”

**2. “the at least one attribute of the signal is locked and prevented from changing in the second mode when the design of the system changes”**

As discussed above in section III.A, the user manual does not disclose that the at least one attribute of the signal is locked and prevented from changing in the second mode when the design of the system changes.

As such, Applicant requests withdrawal of the rejection of claim 23 under 35 U.S.C. §102(b).

**F. Claims 24-26**

Claims 24-26 depend on base claim 23 and, as such, incorporate all of the features of claim 23. Accordingly, claims 24-26 are in condition for allowance for at least the reasons set forth above with respect to claim 23.

**G. Claim 27**

Applicant respectfully submits that the user manual does not disclose at least the following features of claim 27: (1) “when a predetermined event occurs, automatically determining the signal attributes for the signals that meet the match criteria,” and (2) “the at least one attribute of the signal is locked to be prevented from changing when the design of the target system changes.”

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**1. "when a predetermined event occurs, automatically determining the signal attributes for the signals that meet the match criteria"**

The Examiner refers to the user manual, page 9-149 as disclosing the above-identified feature. (See Office Action, page 8). Applicant respectfully submits that the referenced portion of the user manual does not disclose "when a predetermined event occurs, automatically determining the signal attributes for the signals that meet the match criteria," as required by claim 27.

As discussed above in section III.A, when the Latch (buffer) input field is selected, the Input port "outputs the value of its input at the previous time step." (See the manual, page 9-149). Although the Inport block provides a latch option, the referenced portion of the user manual does not disclose "when a predetermined event occurs, automatically determining the signal attributes for the signals *that meet the match criteria* (emphasis added)," as required by claim 27. In the referenced portion of the user manual, the Inport block stores or latches its input signal at a previous time step, and outputs the stored or latched input signal on the occurrence of a trigger signal. The referenced portion of the user manual does not disclose that the Inport automatically determines the attribute of the signals *that meet the match criteria* when a predetermined event occurs, as required by claim 27. The referenced portion of the user manual is silent about match criteria for selecting signals.

**2. "the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes"**

The Examiner refers to the user manual, page 9-149 as disclosing this feature. (See the Office Action, page 8). As discussed above in section III.A, the referenced portion of the user manual does not disclose that "the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes," as required by claim 27.

As such, Applicant requests withdrawal of the rejection of claim 27 under 35 U.S.C. §102(b).

**H. Claim 28**

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Claim 28 depends on base claim 27 and, as such, incorporates all of the features of claim 27. Accordingly, claim 28 is in condition for allowance for at least the reasons set forth above with respect to claim 27.

### **I. Claim 29**

Applicant respectfully submits that the user manual does not disclose at least the following features of claim 29: (1) "a mode unit for setting the system to a first mode in which the system automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event," and (2) "the first mode changes to a second mode on the occurrence of the triggering event in which the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes."

#### **1. "a mode unit for setting the system to a first mode in which the system automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event"**

In rejecting claim 29, the Examiner relies on the same reasons set forth in connection with the rejection of claims 1-8, 12 and 17-20. (See Office Action, page 9). In the rejection of claim 1, the Examiner refers to pages 9-148 and 9-149 as disclosing this feature. Applicant respectfully submits that the referenced portion of the user manual does not disclose "a mode unit for setting the system to a first mode in which the system automatically determines and locks the at least one attribute of the signal on an occurrence of a triggering event," as required by claim 29. As discussed above in section III.A, the referenced portion of the user manual does not disclose that the Inport automatically determines and *locks* the at least one attribute of the signal *on an occurrence of a triggering event*, as required by claim 29.

#### **2. "the first mode changes to a second mode on the occurrence of the triggering event in which the at least one attribute of the signal is locked to be prevented from changing when the design of the system changes"**

Applicant respectfully submits that the referenced portion of the user manual does not disclose that "the first mode changes to a second mode on the occurrence of the triggering event in which the at least one attribute of the signal is locked to be prevented from changing when the



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design of the system changes," as required by claim 29. As discussed above in section III.A, the user manual is silent about locking signals when the design of the system changes.

As such, Applicant requests withdrawal of the rejection of claim 29 under 35 U.S.C. §102(b).

#### **J. Claims 30-36**

Claims 30-36 depend on base claim 29 and, as such, incorporate all of the features of claim 29. Accordingly, claims 30-36 are in condition for allowance for at least the reasons set forth above with respect to claim 29.

Furthermore, the user manual does not disclose the following feature of claim 32: "an application programming interface (API) for automatically determining the at least one attribute of the signal." The Examiner relies on the same reasons set forth in connection with the rejection of claims 1-8, 12 and 17-20. (See the Office Action, page 9). As discussed above in section III.B, the referenced portion is silent about an API.

As such, Applicant requests withdrawal of the rejection of claim 32 under 35 U.S.C. §102(b), and allowance of the claim.

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**IV. Conclusion**

In view of the above amendment, Applicant believes the pending application is in condition for allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicant's attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-053. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: July 16, 2007

Respectfully submitted,

By 

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